

## Lunar Health Monitor, Phase II

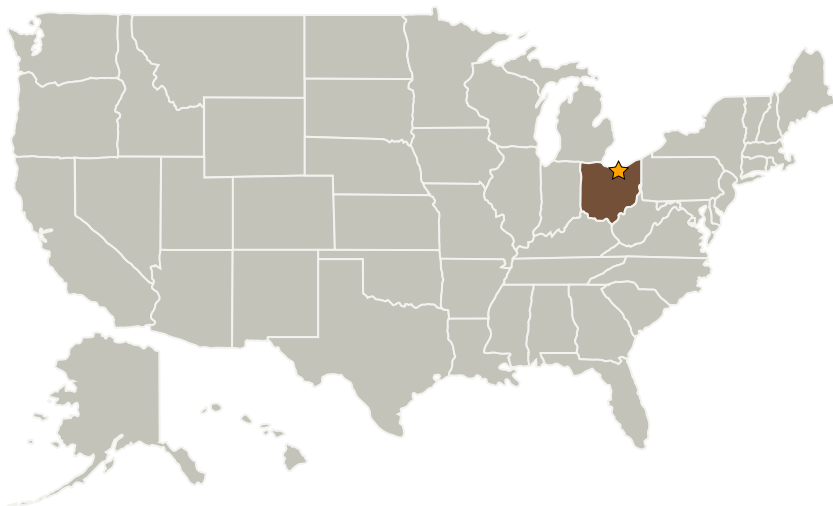
Completed Technology Project (2008 - 2010)



## Project Introduction

During the Phase II Lunar Health Monitor program, Orbital Research will develop a second generation wearable sensor suite for astronaut physiologic monitoring. The low profile system will be appropriate for both Extravehicular activities (EVA) and Intravehicular activities (IVA) monitoring scenarios. The EVA and IVA wearable platforms are capable of monitoring a complete physiologic profile of overall astronaut health status. Sensors of respiration, body temperature, acceleration and cardiac data are included. Inclusive in this sensor suite is Orbital's FDA cleared and patented dry recording electrodes. The sensors are held to the body via the garment and function without any tapes, adhesives or gels. The sensors are mechanically connected to the sensor suite. The mechanical connections allow sensors to be semi-permanently interfaced with either the EVA or IVA designs. These connectors allow sensors to be added, removed or replaced based on monitor application or anatomical constraints. The Lunar Health Monitor is designed to be continuously worn serving as a safety mechanism for out of vehicle exploration missions and a monitoring device for applications such as in orbit fitness assessment. The Lunar Health Monitor is easy to don and doff and non-encumbering to routine and functional tasks.

## Primary U.S. Work Locations and Key Partners



Lunar Health Monitor, Phase II

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## Organizational Responsibility

**Responsible Mission Directorate:**

Space Technology Mission Directorate (STMD)

**Lead Center / Facility:**

Glenn Research Center (GRC)

**Responsible Program:**

Small Business Innovation Research/Small Business Tech Transfer

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Organizations Performing Work	Role	Type	Location
★ Glenn Research Center(GRC)	Lead Organization	NASA Center	Cleveland, Ohio
Orbital Research, Inc.	Supporting Organization	Industry	Cleveland, Ohio

## Primary U.S. Work Locations

Ohio

## Project Transitions

**May 2008:** Project Start**May 2010:** Closed out

## Project Management

**Program Director:**

Jason L Kessler

**Program Manager:**

Carlos Torrez

## Technology Areas

**Primary:**

- TX06 Human Health, Life Support, and Habitation Systems
  - └ TX06.3 Human Health and Performance
    - └ TX06.3.4 Contact-less / Wearable Human Health and Performance Monitoring